

NEW VARIETAL COMBINATIONS IN *PHYSARIA*
(BRASSICACEAE)

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The following new varietal combinations are made in accordance with the precepts of Turner and Nesom (2000):

Physaria arenosa (Richardson) O'Kane & Al-Shehbaz var. ***argillosa*** (Rollins & E. A. Shaw) B. L. Turner, **comb. nov.**

Based upon *Lesquerella arenosa* var. *argillosa* Rollins & E. A. Shaw, *Lesquerella* North America. 178. 1973.

Physaria argyraea (A. Gray) O'Kane & Al-Shehbaz var. ***diffusa*** (Rollins) B. L. Turner, **comb. nov.**

Based upon *Lesquerella diffusa* Rollins, J. Arnold Arb. 21: 395. 1940.

Rollins and Shaw (1973) treated this mainly Mexican taxon as a subspecies of *P. argyraea*, but Rollins (1993) subsequently reduced this to varietal rank. Al-Shehbaz and O'Kane (2002), however, opted to reaffirm its subspecific status. More detailed examination of populations in the field might show that it is deserving of specific rank; at least I have been unable to detect intermediates between the two taxa among herbarium specimens (LL, TEX), nor were these called to the fore by Rollins and Shaw (1973) or Rollins (1993).

Physaria gordonii (A. Gray) O'Kane & Al-Shehbaz var. ***densifolia*** (Rollins) B. L. Turner, **comb. nov.**

Based upon *Lesquerella gordonii* var. *densifolia* Rollins, *Cruciferae* Continental N. Amer. 621. 1993.

Al-Shehbaz and O'Kane (2002) recognized this taxon as a subspecies of *P. gordonii* without comment.

Physaria gracilis (Hook.) O'Kane & Al-Shehbaz var. **repanda** (Nutt.) B. L. Turner, **stat. et comb. nov.**

Based upon *Vesicaria repanda* Nutt. in Torrey & A. Gray, Fl. N. Amer. 1: 101. 1838.

Rollins and Shaw (1973) treated this as a subspecies of *Lesquerella gracilis* (= *Physaria* g. subsp. *nutallii*), as did Al-Shehbaz and O'Kane (2002). If treated as a variety, however, it must take the earliest name at that rank (*Lesquerella gracilis* var. *repanda* [Nutt.] Payson).

Physaria hemiphsaria (Maguire) O'Kane & Al-Shehbaz var. **lucens** (S. L. Welsh & Reveal) B. L. Turner, **stat. nov.**

Based upon *Lesquerella hemiphsaria* var. *lucens* S. L. Welsh & Reveal, Great Basin Naturalist 37: 338. 1977.

Rollins (1993) maintained this taxon at the varietal level; Al-Shehbaz and O'Kane (2002), however, treated it as a subspecies.

Physaria hitchcockii (Munz) O'Kane & Al-Shehbaz var. **rubicundula** (Rollins) B. L. Turner, **stat. et comb. nov.**

Based upon *Lesquerella rubicundula* Rollins, Contr. Dudley Herb. 3: 178. 1941.

Rollins (1993) maintained this taxon at the specific level, *Lesquerella rubicundula* Rollins (= *Physaria rubicundula* (Rollins) S. L. Welsh); Al-Shehbaz and O'Kane (2002) presented a more detailed account of the species, reducing it to subspecific rank.

Physaria kingii (S. Watson) O'Kane & Al-Shehbaz var. **bernardina** (Munz) B. L. Turner, **stat. et comb. nov.**

Based upon *Lesquerella bernardina* Munz, Bull. S. Calif. Acad. Sci. 31: 62. 1932.

Both Rollins & Shaw (1973) and Al-Shehbaz and O'Kane (2002) treated this taxon at the subspecific level, as did Munz some 26 years after proposing the taxon.

Physaria kingii (S. Watson) O'Kane & Al-Shehbaz var. **cobrensis** (Rollins & E. A. Shaw) B. L. Turner, **comb. nov.**

Based upon *Lesquerella kingii* var. *cobrensis* Rollins & Shaw, *Lesquerella* in N. Amer. 255. 1973.

Al-Shehbaz and O'Kane (2002) treated this taxon as a subspecies; Rollins and Shaw (1973) treated it as one of two varieties in the subspecies *kingii*.

Physaria kingii (S. Watson) O'Kane & Al-Shehbaz var. **diversifolia** (Greene) B. L. Turner, **comb. nov.**

Based upon *Lesquerella diversifolia* Greene, Pittonia 4: 309. 1901.

This taxon has been validly treated as both a variety and subspecies of *Lesquerella occidentalis*; Rollins and Shaw (1973) treated it as a subspecies of *L. kingii*, this subsequently recognized at the varietal level by Rollins (1993); Al-Shehbaz and O'Kane (2002) treated it as a subspecies of *Physaria kingii*.

Physaria ovalifolia (Rydb.) O'Kane & Al-Shehbaz var. **alba** (Goodman) B. L. Turner, **stat. nov.**

Based upon *Lesquerella ovalifolia* var. *alba* Goodman, Rhodora 38: 239. 1936.

Rollins and Shaw (1973), Rollins (1993), and Al-shehbaz and O'Kane (2002) treated this taxon as a subspecies of *P. ovalifolia*; the

former two authors suggested that the two taxa perhaps intergrade in western Oklahoma.

Physaria purpurea (A. Gray) O'Kane & Al-Shehbaz var. **foliosa** (Rollins) B. L. Turner, **comb. nov.**

Based upon *Lesquerella purpurea* var. *foliosa* Rollins, Contr. Dudley Herb. 3: 180. 1941.

Rollins and Shaw (1973) recognized this weakly differentiated taxon as a subspecies of *Lesquerella purpurea*, but Rollins (1993) chose not to recognize infraspecific taxa under *L. purpurea*. Al-Shehbaz and O'Kane (2002), however, treated this mostly Mexican taxon as a subspecies. Rollins and Shaw (1973) noted that it seems to grade into the typical variety in Trans-Pecos, Texas, which seems to be the case.

Physaria reediana O'Kane & Al-Shehbaz var. **spatulata** (Rydb.) B. L. Turner, **comb. nov.**

Based upon *Lesquerella spatulata* Rydb., Contrib. U. S. Natl. Herb. 3: 486. 1896.

Al-Shehbaz and O'Kane (2002) treated this taxon as a subspecies of *P. reediana*, but noted that Rollins (1993) treated it as a variety of *Lesquerella alpina*.

Physaria rosei (Rollins) O'Kane & Al-Shehbaz var. **perotensis** (Rollins) B. L. Turner, **stat. nov.**

Based upon *Lesquerella rosei* var. *perotensis* Rollins, Contrib. Gray Herb. 214. 23. 1984.

Al-Shehbaz and O'Kane (2002) treated this Mexican taxon at the subspecific level.

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